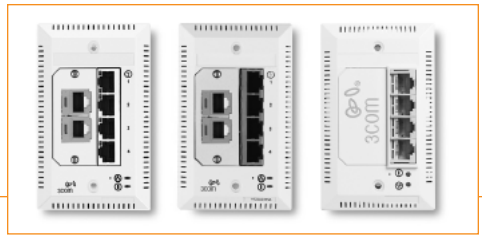

DATA SHEET

# 3Com® IntelliJack™ Switch Family

## Innovative "in the Wall" Solution: U.S.-Standard

## Key Benefits

**Cost-Saving Infrastructure Expansion**
Quadruple your LAN ports with significantly lower costs and fewer disruptions than pulling extra Ethernet cables.

**Adaptable Device Connectivity**
One 3Com® IntelliJack™ Switch provides four 10/100 Mbps switched LAN ports and optional ports for telephony or additional LAN connections.

**"In the Wall" Design**
Compact wall-mounted unit reduces workspace clutter and safeguards network connectivity from tampering, damage, or theft.

**Flexible Power**
Options include IEEE 802.3af Power over Ethernet, locally available AC power, and power forwarding.

**Converged, Secure Networks**
Advanced capabilities including traffic prioritization, industry-standard VLANs, and a "location mapping" feature that optimizes network jack connections for voice, video, and data.

**Seamless Integration**
Standards compliance includes Ethernet, Fast Ethernet, Voice over IP (VoIP), Power over Ethernet, and building and telecommunications wiring specifications.

**Drop-In Installation**
Switches mount without disturbing wall spaces, making them particularly suited for older or hard-to-wire facilities.

Transform a simple LAN outlet into a four-port, intelligent, "in the wall" Fast Ethernet switch

3Com IntelliJack switches are unique "in the wall" devices that quickly convert single port LAN wall outlets into four switched ports. They work in almost any network environment—including enterprise businesses, government offices, dormitories, hospitals, classrooms, laboratories, public kiosks, conference rooms, and shared office spaces. Unlike freestanding hubs or switches, these intelligent network jacks are not easily damaged or disconnected, and they are affixed to the wall for added physical security.

The IntelliJack Switch NJ220 comes with advanced switching, security, and management features, making it particularly suited for converged voice and data environments, with the added flexibility of optional pass-through connectivity and Power over Ethernet forwarding capabilities. The IntelliJack Switch NJ100 is similar to the NJ220 but without the enhanced security and remote management controls. The Network Jack NJ90 is 3Com's most economical solution for expanding a single LAN link into four autonegotiating 10/100 Mbps LAN ports.

3Com compatible power sources, which are required and sold separately, include inline Power over Ethernet and local AC adapters. For an integrated endspan solution, the 3Com SuperStack® 3 Switch 4400 PWR combines standard data switching and power injection in a single network appliance.

## 3Com IntelliJack Switch Setup

**Figure 1:** IEEE 802.3af-compliant Power over Ethernet network configuration with power forwarding to another device.

1. 3Com SuperStack 3 Switch 4400 PWR (3C17205) delivers data and power over Category 5/5e cabling.
2. The switched ports of the 3Com IntelliJack Switch prioritize voice and data traffic for connected devices.
3. Models NJ220 and NJ100 forward Power over Ethernet to a 3Com IEEE 802.3af-compliant phone or other 802.3af-compliant device.

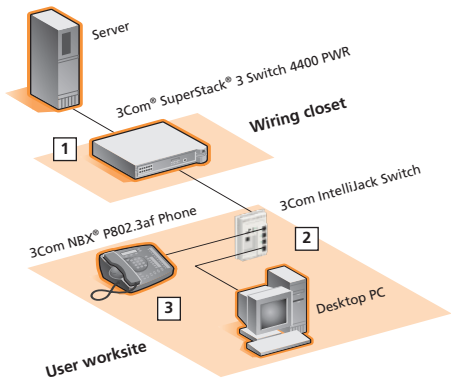


**Figure 1**

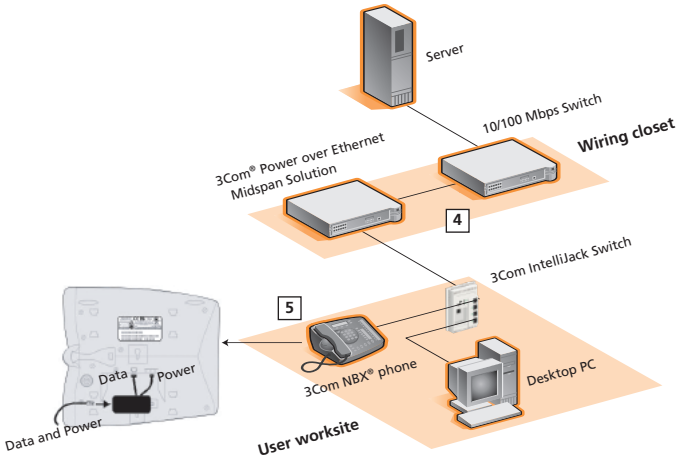


**Figure 2**

**Figure 2:** Retrofitting an existing Ethernet infrastructure to support Power over Ethernet.

4. 3Com Power over Ethernet Multiport or Single-Port Midspan Solution (3CNJPSE24, 3CNJPSE) injects 48 VDC Power over Ethernet into existing 10/100 Mbps switched connections.
5. A prestandard 24-volt NBX phone can be modified with the 3Com NBX Phone Power Module (3CNJVOIPMOD-NBX) to accept 48 VDC Power over Ethernet.

**Figure 3:** The 3Com IntelliJack Switch AC Power Supply (3CNJPSL) is required for LANs without Power over Ethernet capabilities.

6. LAN-facing downlink port and cabling are concealed behind the faceplate.

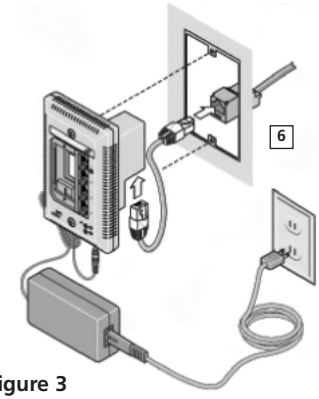


**Figure 3**

## More cost-effective than Category 5e cabling, more secure than a desktop hub or switch

**3Com IntelliJack Switch NJ220**
This "in the wall" managed switch comes bundled with software utilities that help streamline administration tasks and boost network security. Advanced switching and management features make it ideal for connecting networked telephony. Compatible phones can be powered from port 1, saving in wiring expense. For optimum quality and security, voice traffic can be labeled high priority and routed through its own VLAN.

Enterprise-ready, the NJ220 can be discovered and controlled by most SNMP-compliant management platforms— including 3Com Network Supervisor and HP OpenView. Security features such as IEEE 802.1X network log-in, MAC filtering, and port-based rate limiting allow IT managers to prevent network access by unauthorized users.

**3Com IntelliJack Switch NJ100**
The NJ100 provides the same connectivity options as the NJ220, but without enhanced security and management support. Optional pass-through ports and Power over Ethernet forwarding let you terminate additional voice, cable, or network wiring in the same wall outlet. The wall-mounted case provides durability and permanence for high-traffic locations, such as printer rooms or public kiosks.

**3Com Network Jack NJ90**
For networks that don't require enhanced security, device manageability or extra pass-through ports, this unmanaged 10/100 Mbps switch can deliver significant cost-savings when compared to pulling and activating Category 5e cabling for the same number of LAN connections.

**Power over Ethernet**
In addition to the SuperStack endspan switch, 3Com offers 24- and single-port midspan power source equipment (PSE) that inject Power over Ethernet into existing switched networks. To help preserve your telephony investments, an optional power-conversion module enables prestandard 3Com NBX® phones to support 802.3af-compliant inline power.

## Features and Benefits

| Performance, Reliability, Savings | NJ220 | NJ100 | NJ90 |
|---|---|---|---|
| Instantly quadruples switched network infrastructure without disturbing wall spaces or business operations. | ✔ | ✔ | ✔ |
| Standard Ethernet switching includes IEEE 802.1p Packet Prioritization (QoS) and IPv4. | ✔ | ✔ | ✔ |
| **Standards Compatibility** | | | |
| Complies with Ethernet, VoIP, telecommunications, and building standards. | ✔ | ✔ | ✔ |
| IEEE 802.1X Network Log-In security. | ✔ | | |
| Mounts in U.S.-standard wall cutouts; also fits cutouts for Canada, Mexico, and the rest of Latin America. | ✔ | ✔ | ✔ |
| **Power Options** | | | |
| Supports IEEE 802.3af specification for Power over Ethernet. | ✔ | ✔ | ✔ |
| Cisco non-standard Power over Ethernet support. | ✔ | | |
| Supports local AC power; requires 3Com power supply (3CNJPSL). | ✔ | ✔ | ✔ |
| Forwards Power over Ethernet to another device. | ✔ | ✔ | |
| Supports NBX power module (3CNJVOIPMOD-NBX). | ✔ | ✔ | |
| Supports 48-volt power module for selected non-3Com phones (3CNJVOIP-CPOD). | ✔ | ✔ | |
| **Port Options** | | | |
| Supports pass-through adapter plates for additional connectors, including AMP, Avaya, Hubbell, Ortronics, and Panduit. | ✔ | ✔ | |
| **Management** | | | |
| Works with standards-based SNMP network management applications, including 3Com Network Supervisor and HP OpenView. | ✔ | | |
| 3Com Local Configuration Manager streamlines installation and configures network jacks to support central management. | ✔ | | |
| 3Com Central Configuration Manager provides timesaving, remote monitoring and management—from a single device port to groups of multiple network jacks. | ✔ | | |
| Location Mapping pinpoints physical location of network jack-connected devices; facilitates network troubleshooting and IT asset inventories. | ✔ | | |
| Advanced switching features include ToS/Diffserv and multicast flooding control. | ✔ | | |
| Supports IEEE 802.1Q VLANs for improved data security and monitoring. | ✔ | | |
| Port-based rate limiting to control network traffic by speed and type. | ✔ | | |

# Specifications

### Cables and Operating Distances

*10BASE-T:* Category 3, 4, 5, or 5e UTP/STP up to 100 m (328 ft)

*100BASE-TX:* Category 5 or 5e UTP/STP up to 100 m (328 ft)

### Ports

*Ethernet switch:* Four 10/100BASE-TX ports for RJ-45 connectors; store-and-forward, full-/half-duplex, autonegotiation.

*Optional pass-through (NJ220, NJ100 only):* Up to two ports for RJ-11 and/or RJ-45 connectors; requires installation of AMP, Avaya, Hubbell, Ortronics, or Panduit adapter plate in place of the blank plate.

### Power Options

*Power over Ethernet:* Supports any 802.3af-compliant source and most 24 VDC and 48 VDC inline sources.

*Local AC power:* 3Com IntelliJack Switch Power Supply (3CNJPSL) is required for LANs that do not have Power over Ethernet capabilities.

*Power forwarding (NJ220, NJ100 only):* Device receiving power must be 802.3af-compliant or a 3Com NBX phone with power-conversion module (3CNJVOIPMOD-NBX).

### Management (NJ220 only)

Compatible with SNMP v1, 802.1Q VLANs, 802.1p Packet Prioritization/QoS, DHCP, most SNMP-compliant management platforms; 3Com Network Supervisor recommended. For information on management system requirements, visit **www.3com.com** or contact your local 3Com sales office.

### Standards Compliance

*Networking:* IEEE 802.3, 802.3u, 802.3af, 802.1p; 802.1Q and 802.1X (NJ220 only)

*Building:* NEMA-WD6, ANSI/TIA/EIA-568 and -569

*Safety, Emissions:* ICES-003 Class A; VCCI Class A; FCC Class A, CSA, C-Tick, NOM

### Environmental

*Temperature:* 0° to 35° C (32° to 95° F) operating, office environment; -30° to 90° C (-22° to 194° F) storage

*Humidity (noncondensing):* 10%–90% operating, 5%–95% storage

*Altitude:* 0–2,000 m (0–8,000 ft) operating, 0–6,100 m (0–20,000 ft) storage

### LED Indicators

Unit power, link activity/status of ports; power forwarding (NJ220, NJ100 only)

### Package Contents

*NJ220/NJ100 single-pack:* One network jack and mounting screws, RJ-45 coupler cable, three adapter plates (Panduit, Avaya, blank), user guide; NJ220 includes quick start guide and CD-ROM with management utilities

*NJ220 20-pack:* 20 network jacks and mounting screws, 20 RJ-45 coupler cables, 20 blank adapter plates, user guide, quick start guide, and CD-ROM with management utilities

*NJ90 single-pack:* One network jack and mounting screws, RJ-45 coupler cable, user guide

*NJ90 20-pack:* 20 network jacks and mounting screws, 20 RJ-45 coupler cables, one user guide

*Avaya/Panduit adapter plates, 20-pack:* 20 adapter plates and mounting screws

*Hubbell/AMP/Ortronics adapter plates, 20-pack:* 20 snap-in adapter plates

*Power over Ethernet source:* Power switch/midspan PSE, power cord

*Local power source:* AC power adapter, power cord

*NBX module:* Phone module, hook-and-loop mounting strip

### Product Warranty

For details on product warranties, support, and service—including extended service contracts—please refer to the product manual or visit our warranty support page at **www.3com.com**.

### Customer Support

3Com Knowledgebase offers proven answers and technical expertise—7 days a week, 24 hours per day. Explore our Knowledgebase, as well as product information, technical tips, and FAQs by visiting **www.3com.com**.

### Dimensions

| | *Height* | *Width* | *Depth* |
|---|---|---|---|
| IntelliJack switch | 11.4 cm (4.50 in) | 7.0 cm (2.75 in) | 5.8 cm (2.30 in) |
| Adapter plate | 2.6 cm (1.02 in) | 5.8 cm (2.3 in) | 0.2 cm (0.08 in) |
| Endspan PoE switch | 1 RU<br>4.36 cm (1.71 in) | 19-in rack<br>44.0 cm (17.32 in) | 27.4 cm (10.78 in) |
| 24-port midspan PSE | 1 RU<br>4.40 cm (1.73 in) | 19-in rack<br>43.3 cm (17.04 in) | 30.2 cm (11.88 in) |
| Single-port midspan PSE | 2.6 cm (1.02 in) | 6.4 cm (2.52 in) | 10.2 cm (4.02 in) |
| AC power supply | 3.8 cm (1.50 in) | 5.1 cm (2.00 in) | 8.9 cm (3.50 in) |
| NBX module | 2.4 cm (0.94 in) | 7.8 cm (3.07 in) | 3.8 cm (1.50 in) |
| 48-volt module | 1.9 cm (0.75 in) | 2.5 cm (1.00 in) | 5.1 cm (2.00 in) |
| Extension ring | 10.2 cm (4.01 in) | 5.2 cm (2.05 in) | 0.8 cm (0.30 in) |

# Ordering Information

| | |
|---|---|
| 3Com IntelliJack Switch NJ220 | |
| (single-pack, black) | 3CNJ220-BLK |
| (single-pack, cream) | 3CNJ220-CRM |
| (20-pack, black) | 3CNJ220-BLK-20 |
| (20-pack, cream) | 3CNJ220-CRM-20 |
| 3Com IntelliJack Switch NJ100 (single-pack, cream) | 3CNJ100 |
| 3Com Network Jack NJ90 | |
| (single-pack, cream) | 3CNJ90 |
| (20-pack, cream) | 3CNJ90-20 |

Please note: Earlier models were marketed as Network Jacks. All are part of the IntelliJack family of switches, sharing power sources and adapter plates (where applicable).

| 3Com IntelliJack Switch Adapter Plates for IntelliJack Switches/ Network Jacks (models NJ220, NJ100): | |
|---|---|
| AMP Adapter Plates | |
| (20-pack, black) | 3CNJAPB-AM-20 |
| (20-pack, cream) | 3CNJAP-AM-20 |
| Avaya Adapter Plates | |
| (20-pack, black) | 3CNJAPB-AV-20 |
| (20-pack, cream) | 3CNJAP-AV-20 |
| Hubbell Adapter Plates | |
| (20-pack, black) | 3CNJAPB-HU-20 |
| (20-pack, cream) | 3CNJAP-HU-20 |
| Ortronics Adapter Plates | |
| (20-pack, black) | 3CNJAPB-OR-20 |
| (20-pack, cream) | 3CNJAP-OR-20 |
| Panduit Adapter Plates | |
| (20-pack, black) | 3CNJAPB-PA-20 |
| (20-pack, cream) | 3CNJAP-PA-20 |

| | |
|---|---|
| 3Com SuperStack 3 Switch 4400 PWR (24 ports, 802.3af-compliant) | 3C17205 |
| 3Com Power over Ethernet Multiport Midspan Solution (24 ports, 802.3af-compliant) | 3CNJPSE24 |
| 3Com Power over Ethernet Single-Port Midspan Solution (48 VDC) | 3CNJPSE |
| 3Com IntelliJack Switch AC Power Supply | 3CNJPSL |
| 3Com NBX Phone Power Module (single-pack, black) | 3CNJVOIPMOD-NBX |
| 3Com NBX Phone Power Module (20-pack, black) | 3CNJVOIPMOD-20 |
| 3Com IntelliJack Switch to 48-Volt VoIP Phone Power Module | 3CNJVOIP-CPOD |
| 3Com IntelliJack Switch to 48-Volt VoIP Phone Power Module, 20-pack | 3CNJVOIP-CPOD-20 |
| 3Com IntelliJack Switch Extension Ring | 3CNJEXTRING |

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Possible made practical™

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To learn more about 3Com solutions, visit www.3com.com. 3Com is publicly traded on NASDAQ under the symbol COMS.

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